

To be inserted following "Chapter 8: Natural Resources"; existing "Chapter 9: Implementation Strategy" will become Chapter 10, and subsequent chapters will follow suit.

## CHAPTER 9: SAND & GRAVEL RESOURCES

### Introduction

Sand and gravel are important natural resources found throughout Flathead County. While large amounts of gravel are located throughout the Flathead valley, sand is a resource that is more limited in this area of the state. Gravel Sand and gravel resources provide the foundation upon which our infrastructure is built, defining where, how and to what extent development occurs. Our roads, bridges and highways are all constructed using gravel; the houses we live in, buildings we work in and sidewalks we walk on utilize the resource as well. Access to local gravel resources reduces costs associated with transportation and processing fees, thereby reducing the overall cost of development. The potential for local extraction of sand and gravel resources also affects the overall economic climate by providing jobs and serving local construction industries. Because of this, Developing an awareness of where sand and gravel resources are currently located and what types of activities (extraction, processing, and transportation) are occurring in these locations today is important to the residents of Flathead County for a variety of reasons. Continued growth and development in areas of the County where sand and gravel resources are currently found will result in continued land use conflicts and may limit the availability of these types of resources into the future.

In 2009, a senator from Flathead County sponsored a legislative bill (Senate Bill No. 486) requiring communities provide an inventory of sand and gravel resources within their jurisdiction. consideration of sand and gravel resources in the content of any County Growth Policy. —By requiring local governments to identify these resources, it was thought this information would provide a base upon which future land use regulations could be developed to separate incompatible uses while ensuring an economically viable source of gravel to facilitate and support future development.<sup>1</sup> Changes resulting from this proposal during the 2009 Legislative session now require all Growth Policies to include a description of sand and gravel resources. —within a county's respective jurisdiction.—As part of the Flathead County's Growth Policy Update for the year 2012, this chapter has been added to address these additional requirements and comply with Section 76-1-601 MCA.

Mapping the location and extent of these resources will not only serve to inform future land use planning efforts in Flathead County, but and will help ensure the continued availability and accessibility of sand and gravel for the County's future growth and development needs of Flathead County. Due to the limited data available, this chapter is not intended to be an evaluation of existing materials or a directive on where future sand and gravel extraction should necessarily occur. Pursuant to Section 76-1-601(3)(viii) MCA, this chapters intends to identify existing sand and gravel resources located within the planning jurisdiction of Flathead County, and to develop corresponding goal(s) and

<sup>1</sup> Montana's Growth Policy Resource Book. Montana Department of Commerce Community Development Division. April 2009; pg.33.

policies that may aide in future data collection and planning efforts involving sand and gravel resources.

### Goals & Policies

Existing goals and policies can be found throughout the Flathead County Growth Policy that address sand and gravel resources. Specific goals and policies have been identified below and should be cross-referenced as applicable to this chapter of the Growth Policy:

#### Excerpt from “Chapter 2: Land Uses”

G.12 Mineral resource extraction that is safe, carefully planned, environmentally sound and appropriately segregated from incompatible land uses.

P.12.1 Identify areas of known sand and gravel resources.

P.12.2 Identify areas of significant mineral resource deposits and develop accurate maps reflecting these areas.

P.12.3 Create land use policies that segregate existing and future gravel extraction operations from incompatible land uses – add proposed policy language (6.01.2011):

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**Comment [b1]:** Add language proposed; cross-reference changes in Chapter 2

P.12.4 Develop policies to mitigate the impacts of mineral resource extraction. These may include road maintenance, dust abatement or vegetative buffers.

P.12.5 Designate areas where mineral resource extraction is most appropriate and will have the least impact on other resources and land uses.

P.12.6 Restrict sand and gravel operations in areas that pose a threat to water quality.

P.12.7 Flathead County should encourage progressive reclamation of [mineral] extraction operations.

**Comment [b2]:** Remove?

P.12.8 Require compliance with existing local, state and federal laws regarding oil, gas, and mineral exploration or production.

#### Excerpt from “Chapter 8: Natural Resources”

G.42 Recognize and work to manage Flathead County’s rich heritage of hunting, fishing, timber, agricultural and mineral activities that provide economic benefits while utilizing and protecting our natural resources.

G.44 To be drafted by Planning Board...

## Policies

P.44.1 ~~————— To be drafted by Planning Board...~~

~~Goals and policies found in "Chapter 10: Neighborhood Plans" will require re-numbering accordingly.~~

### PART 1: History of Sand & Gravel Resources and Extraction in Flathead County

The importance of sand and gravel resources in Flathead County has led to a great deal of discussion ~~over the years; in some cases that discussion has led to~~ zoning ~~map and text~~ amendments, and even law suits regarding the evaluation of gravel extraction, and extractive industry in general, ~~through within~~ the Flathead County Zoning Regulations (FCZR). The zoning regulations identify "gravel extraction" and "extractive industry" as two distinct yet similar uses conditionally permitted in select, zoned areas of the County. Although the Planning and Zoning Office has no regulatory reviewing authority over the types of uses in unzoned areas of the County, any extractive industry resulting in the removal of more than 10,000 cubic yards of material proposed in these areas is still required to obtain a permit through the Department of Environmental Quality Opencut Mining Program (pursuant to the Opencut Mining Act, 82-4-401 et seq., MCA).

Certain areas of the County address gravel resources and extractive industry more often than others, due in part to the zoning in place but also based upon the location and availability of gravel resources in particular geographic locations. ~~[The West Valley area is one such location; although there are only a handful of the MDEQ active, permitted gravel extraction operations are recognized by the County and permitted by MDEQ as being active (refer to Map 9.1), the prevalence of residential and agricultural land uses in the West Valley area has historically resulted in led to continued conflict over the years.]~~

**Comment [b3]:** Possibly remove or rework to NOT be so specific to WV area.

~~The West Valley zoning district is unique in that it identifies "gravel extraction" as a conditionally permitted use, whereas agricultural and industrial zoning districts identify "extractive industries" as the type of conditional use under which gravel extraction would be included. A 2008 opinion from the Montana Supreme Court (Flathead Citizens for Quality Growth; Tutvedt Family Part. v. Flathead County Bd. Of Adjustment, case #DA 06-0173), identified the West Valley planning area and zoning district as predominantly residential in character. Section 76-2-209(2) of the Montana Code Annotated identifies instances where the recovery of gravel and certain extractive industries (such as concrete or asphalt operations) can be conditioned or prohibited in residentially zoned areas. In 2010 the Flathead County Commissioners approved a zoning text amendment that added a formal definition of "gravel extraction" to the zoning regulations; this definition included the processing of gravel through operations including crushing, screening, asphalt, wash and concrete plants as well as transportation and stockpiling, and applies to Flathead County as a whole specifically to the West Valley zoning district. Given its proximity to the City of Kalispell and continued development pressure west of town, it is likely the West Valley area will continue to wrestle with these issues in the years to come.~~

**Comment [b4]:** Rework entirely; remove any and all reference to legal cases to prevent interpretation issues.

[Add reference to Commissioner actions, by resolution & brief description.](#)

Another area of the County in which gravel resources and extractive industry is prevalent is the North Fork of the Flathead River. The North Fork area is rural and remote, accessible only by ~~a~~-gravel road that runs for over forty miles north of the City of Columbia Falls. Mining and extraction has been a controversial issue affecting the region since its discovery ~~(in what year—generally?)~~, as the North Fork is part of ~~the a trans-~~boundary region spanning ~~from British Columbia south into Canada and the state of~~ Montana, and serves as the western boundary of Glacier National Park, which has been designated a World Heritage Site and Biosphere Reserve by the United Nations Education Scientific and Cultural Organization (UNESCO). After years of discussion, deliberation and negotiation, a Memorandum of Understanding and Cooperation on Environmental Protection, Climate Action and Energy was signed between the Province of British Columbia and the State of Montana on February 18<sup>th</sup>, 2010. The Memorandum serves to permanently prohibit coal and hard rock mining as well as oil and gas development in the North Fork region. The governments involved have been working since this adoption to secure and retire existing land leases for gas, coal and mining activities, in an effort to return the ecosystem back to its natural state.

## PART 2: Existing Sand & Gravel Resources

Gravel resources are commonly found in river valleys where the water table is high, and in alluvial floodplains along streams and glacial deposits.<sup>2</sup> These areas are generally acknowledged as environmentally sensitive, and are typically designated as floodplain, wetland, or riparian areas having characteristics of prime habitat or sensitive classification. Because gravel extraction must occur where the gravel is located, the potential for conflict is heightened due to the environmentally sensitive nature of these areas and the methods and machinery used to extract the resource.

In the spring of 2010, at the direction of a sub-committee of the Flathead County Planning Board, planning staff researched and compiled available data on surficial soil classifications from the Montana Bureau of Mines and Geology (MTBMG), open cut permits issued through the Montana Department of Environmental Quality (MT DEQ), hard rock and open cut mining permit sections, and the status of existing gravel operations based upon data collected and maintained by the Flathead County GIS Department (through 2006, 2010); the end result is the Flathead County Gravel Resources Map included in this chapter (see Map 9.1).

The map identifies the location of known gravel pits throughout Flathead County and provides their operation status – active, inactive, reclaimed or unknown - as of 2006, 2010. Of the 142 open cut mining operations permitted in the valley, 130 are currently active, 11 are inactive and 1 has been reclaimed. These locations are overlaid atop the surficial soils data provided by the Bureau of Mines and Geology, showing the types of

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<sup>2</sup> Sand & Gravel Operations in Montana; [www.montanagravel.org](http://www.montanagravel.org)

soil classification units prevalent throughout the Flathead Valley. The map also includes data points identifying each operation having obtained an open cut or hard rock mining permit through the state Department of Environmental Quality; these permit locations typically correspond to a mapped gravel pit location. Open cut permits include sand, gravel, bentonite, scoria, peat moss and soil extraction; hard rock permits include rock picking, quarrying for talus, ballast as well as mining for gold, leads, copper, zinc and other minerals.<sup>3</sup>

Although permitted sand and gravel operations are located throughout Flathead County, it should not be assumed that just because an area is void of any existing, permitted extractive industry there are no resources present. If anything, the dispersed nature of resource extraction in Flathead County is beneficial to the economic vitality of the industry and the area in which it is located. Having localized sand and gravel resources in a variety of locations reduces hauling costs to complete infrastructure improvements in these areas and may reduce transportation costs for employees as well.

#### **PART 4: Planning for Future Sand and Gravel Extraction**

<sup>3</sup> Information provided by Craig Jones, MDEQ Hard Rock Mining Permitting Program (May 27, 2011); James Connor, MDEQ Open Cut Permit Program (May 25, 2011).

**TABLE 9.1 – MDEQ Open Cut Mining Permits**

<b>Permit No.</b>	<b>Operator</b>	<b>Mine Status</b>
<u>110</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>111</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>1118</u>	<u>COLUMBIA FALLS INDUSTRIAL PARK</u>	<u>ACTIVE</u>
<u>1119</u>	<u>COLUMBIA FALLS INDUSTRIAL PARK</u>	<u>ACTIVE</u>
<u>112</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>1125</u>	<u>CLARK ED A</u>	<u>ACTIVE</u>
<u>1133</u>	<u>CRESTON TOPSOIL</u>	<u>ACTIVE</u>
<u>114</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>1147</u>	<u>DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT</u>	<u>ACTIVE</u>
<u>1148</u>	<u>DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT</u>	<u>ACTIVE</u>
<u>115</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>1151</u>	<u>DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT</u>	<u>ACTIVE</u>
<u>1152</u>	<u>DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT</u>	<u>ACTIVE</u>
<u>1160</u>	<u>DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT</u>	<u>ACTIVE</u>
<u>1161</u>	<u>DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT</u>	<u>ACTIVE</u>
<u>1162</u>	<u>DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT</u>	<u>ACTIVE</u>
<u>1163</u>	<u>DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT</u>	<u>ACTIVE</u>
<u>1164</u>	<u>DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT</u>	<u>ACTIVE</u>
<u>1181</u>	<u>ESLICK PAUL</u>	<u>INACTIVE</u>
<u>12</u>	<u>ANDERSON LLOYD K</u>	<u>ACTIVE</u>
<u>1207</u>	<u>FH STOLTZE LAND AND LUMBER COMPANY</u>	<u>ACTIVE</u>
<u>126</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>127</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>1276</u>	<u>GOOSE BAY EQUIPMENT INC</u>	<u>ACTIVE</u>
<u>1277</u>	<u>GOOSE BAY EQUIPMENT INC</u>	<u>ACTIVE</u>
<u>128</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>1281</u>	<u>GLACIER HORSE RANCH LLC</u>	<u>INACTIVE</u>
<u>129</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>1298</u>	<u>GRIZZLY LOGGING AND LUMBER LLC DBA GRIZZLY GRAVEL PRODUCTS</u>	<u>ACTIVE</u>
<u>13</u>	<u>WAGONERS SAND AND GRAVEL</u>	<u>ACTIVE</u>
<u>130</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>1305</u>	<u>HANSON NEIL</u>	<u>ACTIVE</u>
<u>1315</u>	<u>HAMILTON HOWARD D</u>	<u>ACTIVE</u>
<u>1320</u>	<u>HANSON NORMAN K</u>	<u>ACTIVE</u>
<u>1321</u>	<u>HANSON NORMAN K</u>	<u>INACTIVE</u>
<u>1337</u>	<u>HELENA SAND AND GRAVEL INC</u>	<u>ACTIVE</u>
<u>1383</u>	<u>KELLER LES</u>	<u>ACTIVE</u>

1387	<u>KLEMPER IOE AND RON</u>	<u>ACTIVE</u>
1388	<u>KLEMPER IOE AND RON</u>	<u>ACTIVE</u>
1407	<u>KNIFE RIVER</u>	<u>ACTIVE</u>
1408	<u>KNIFE RIVER</u>	<u>ACTIVE</u>
1410	<u>KNIFE RIVER</u>	<u>ACTIVE</u>
1411	<u>KNIFE RIVER</u>	<u>ACTIVE</u>
1416	<u>KNIFE RIVER</u>	<u>ACTIVE</u>
142	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
1422	<u>KRUEGER GARY</u>	<u>ACTIVE</u>
1424	<u>LEIGHTY BROS CONSTRUCTION LLC</u>	<u>ACTIVE</u>
1432	<u>LHC INC</u>	<u>ACTIVE</u>
1440	<u>LASALLE SAND AND GRAVEL</u>	<u>ACTIVE</u>
1478	<u>MANY LAKES EAST</u>	<u>ACTIVE</u>
1494	<u>MURPHYS EXCAVATING INC</u>	<u>ACTIVE</u>
1520	<u>OLSEN RUSSELL</u>	<u>ACTIVE</u>
1527	<u>PLUM CREEK TIMBERLANDS LP</u>	<u>ACTIVE</u>
1552	<u>POTTS LYLE</u>	<u>INACTIVE</u>
1555	<u>PUMCO INC</u>	<u>ACTIVE</u>
1559	<u>RIVERSIDE CONTRACTING INC</u>	<u>ACTIVE</u>
1640	<u>RUSSELL KIMBERLY J</u>	<u>INACTIVE</u>
1645	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>ACTIVE</u>
1648	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>ACTIVE</u>
1650	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>ACTIVE</u>
1658	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>ACTIVE</u>
1659	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>ACTIVE</u>
1661	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>INACTIVE</u>
1668	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>ACTIVE</u>
1669	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>ACTIVE</u>
1679	<u>SCHLEGEL AND SONS CONTRACTOR INC</u>	<u>ACTIVE</u>
1685	<u>SPOKLE GRANT</u>	<u>ACTIVE</u>
1686	<u>SPOKLE GRANT</u>	<u>ACTIVE</u>
1713	<u>SPOKLE ROBERT</u>	<u>ACTIVE</u>
1714	<u>STREET ROBIN</u>	<u>ACTIVE</u>
1717	<u>SILVERTIP PROPERTIES</u>	<u>ACTIVE</u>
1719	<u>STUPAK JAMES</u>	<u>ACTIVE</u>
1720	<u>STW PARTNERSHIP</u>	<u>ACTIVE</u>
1721	<u>SUDAN INC</u>	<u>ACTIVE</u>
1724	<u>SWIFT CREEK CABINS LLC</u>	<u>ACTIVE</u>
1725	<u>SCHWARZ CONSTRUCTION</u>	<u>ACTIVE</u>
1726	<u>CHARLAND STEVE R</u>	<u>ACTIVE</u>
1731	<u>TUNGSTEN HOLDINGS INC</u>	<u>ACTIVE</u>
1733	<u>TAMARACK HOLDINGS LLC</u>	<u>ACTIVE</u>
1734	<u>THORNBERRY RONALD AND ESTHER</u>	<u>ACTIVE</u>
1743	<u>TIMBERLINE READY MIX</u>	<u>ACTIVE</u>
1753	<u>TURNER WAYNE</u>	<u>ACTIVE</u>
1754	<u>TUTVEDT BRUCE</u>	<u>ACTIVE</u>
1757	<u>US FISH AND WILDLIFE SERVICE</u>	<u>ACTIVE</u>
1769	<u>WAGAR JOE</u>	<u>ACTIVE</u>
1783	<u>WOODRING ERIC</u>	<u>ACTIVE</u>
1788	<u>WHITE ROCK AGGREGATE LLC</u>	<u>ACTIVE</u>
1797	<u>WAGONERS SAND AND GRAVEL</u>	<u>ACTIVE</u>
1798	<u>WAGONERS SAND AND GRAVEL</u>	<u>ACTIVE</u>
1807	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>WITHDRAWN</u>

<u>1812</u>	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>INACTIVE</u>
<u>1821</u>	<u>PLUM CREEK TIMBERLANDS LP</u>	<u>DENIED</u>
<u>1846</u>	<u>WHITE ROCK AGGREGATE LLC</u>	<u>ACTIVE</u>
<u>1873</u>	<u>KNIFE RIVER</u>	<u>PENDING</u>
<u>1886</u>	<u>ITL GROUP INC - KALISPELL</u>	<u>INACTIVE</u>
<u>1910</u>	<u>WILKE LAURENCE G</u>	<u>DENIED</u>
<u>1946</u>	<u>SCHELLINGER CONSTRUCTION COMPANY</u>	<u>ACTIVE</u>
<u>1991</u>	<u>DEPARTMENT OF TRANSPORTATION</u>	<u>ACTIVE</u>
<u>1992</u>	<u>GRIZZLY LOGGING AND LUMBER LLC DBA GRIZZLY GRAVEL PRODUCTS</u>	<u>ACTIVE</u>
<u>2</u>	<u>PACK AND COMPANY</u>	<u>INACTIVE</u>
<u>2006</u>	<u>ESLICK PAUL</u>	<u>PENDING</u>
<u>2031</u>	<u>WAGONERS SAND AND GRAVEL</u>	<u>ACTIVE</u>
<u>24</u>	<u>DOANE DON</u>	<u>ACTIVE</u>
<u>25</u>	<u>ROBINSON SAND AND GRAVEL</u>	<u>ACTIVE</u>
<u>3</u>	<u>CITY OF WHITEFISH</u>	<u>ACTIVE</u>
<u>30</u>	<u>ITL GROUP DBA MCELROY AND WILKEN</u>	<u>ACTIVE</u>
<u>305</u>	<u>DOTEN NEIL</u>	<u>ACTIVE</u>
<u>38</u>	<u>NORVELL LINDA EVART</u>	<u>ACTIVE</u>
<u>486</u>	<u>PLUM CREEK TIMBERLANDS LP</u>	<u>ACTIVE</u>
<u>500</u>	<u>PLUM CREEK TIMBERLANDS LP</u>	<u>ACTIVE</u>
<u>515</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
<u>516</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
<u>517</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
<u>518</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
<u>519</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
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<u>522</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
<u>523</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
<u>524</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
<u>525</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
<u>526</u>	<u>FLATHEAD COUNTY ROAD DEPARTMENT</u>	<u>ACTIVE</u>
<u>54</u>	<u>ITL GROUP DBA MCELROY AND WILKEN</u>	<u>ACTIVE</u>
<u>545</u>	<u>MISSION VALLEY CONCRETE</u>	<u>ACTIVE</u>
<u>55</u>	<u>PACK AND COMPANY</u>	<u>ACTIVE</u>
<u>650</u>	<u>LHC INC</u>	<u>ACTIVE</u>
<u>661</u>	<u>THORNBERRY RONALD AND ESTHER</u>	<u>ACTIVE</u>
<u>671</u>	<u>AC ENTERPRISES LLC</u>	<u>ACTIVE</u>
<u>706</u>	<u>BEASLEY JOE</u>	<u>ACTIVE</u>
<u>721</u>	<u>BROWNN PAMELA</u>	<u>ACTIVE</u>
<u>724</u>	<u>BRASH PROJECTS LLC</u>	<u>ACTIVE</u>
<u>83</u>	<u>HAMILTON HOWARD D</u>	<u>ACTIVE</u>
<u>-</u>	<u>RUSSELL WILLIAM M</u>	<u>ACTIVE</u>
<u>-</u>	<u>SPOKLE ROBERT</u>	<u>INACTIVE</u>



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